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TIMBER RESOURCE INFORMATION SYSTEM

Arthur M. Woll Bureau of Indian Affairs Washington, D. C. 20245

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Type I Progress Report for Period 1 March 1973 - 30 April 1973

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Type I Progress Report ERTS-I

- a. Timber Resource Information System (TRIS) SR 229
- b. IN 053
- c. The Service Center for BLM in Portland, Oregon has agreed to serve as a data handling facility for this investigation. A central facility is needed to accommodate all the organizations involved; the Quinualt Tribe in western Washington, Colville Tribe in eastern Washington, and Warm Springs Tribe in Oregon; Washington State Department of Natural Resources; BLM (State Office and Service Center); U.S. Forest Service; and Bureau of Indian Affairs. The cost of duplicating data and the limited facilities with which to do it, necessitated this central handling facility. The center has U-2 film flown in August 1972 and also ERTS imagery from that period. ERTS data were hand carried to Portland in February. We are awaiting April and May ERTS imagery which is necessary for change detection or resource monitoring. The next progress report will include a detailed inventory of data received up to June 30, 1973.
- The investigators from each agency agreed that their land managers need an information system from TRIS that will: 1) translate technical data into meaningful information, and 2) moniltor the results of his actions on the environment. The work statement calls for resource overlays delineated from the high-altitude aircraft photography. These delineations represent "ground truth" in units large or broad enough for identification and monitoring from the ERTS imagery. The investigators are convinced that their NASA and other high-altitude photography (for example, Mark Hurd photography, flown 7-1/2 minute quad center, for orthophoto mapping on the Colville) when supported with ground measurements and existing surveys, contain all the resource data needed for overall land management planning. This overall planning would include land-use classification, environmental impact statements, etc. The Quinualt Tribe is contracting to have a planimetric base map prepared from their NASA, RC-10 camera, U-2 flight, flown in July 1972 as aircraft support of the ERTS-I coverage. This was flown within one day of the ERTS, RBV coverage of 30 July 72. We have had GE make a color composite of RBV bands 1, 2, and 3 from this July 30 orbit.

Preliminary work statements show two of the agencies have added investigations to the basic theme of interpreting and monitoring. The State of Washington is going to directly compare the same data in their cellular information storage system to the "Raytheon or Boeing type" polygon system. BLM plans to make a computer aggregate

- of map and descriptive attributes into broad delineations to help identify the relationship between ground data and the ERTS imagery. We are presently compiling the formal work statements for each agency involved. During the next reporting period we will have received enough ERTS data to prepare our Data Analysis Plan. We will be preparing the first data overlays.
- e. The investigators are convinced that high-altitude photography when supported with ground measurements and existing surveys, contain all the resource data needed for overall land management planning. This overall planning would include land-use classification, environmental impact statements, etc. First inspection of the RBV-ERTS imagery on the Quinault Reservation shows that much of the cultural and resource detail can be identified. Of particular note, is the obvious contrast between recently harvested timber cutting blocks as opposed to those cut more than a year ago. The RBV color composite would have been of better definition if Band 3 had been excluded. Category IB.
- f. No publications.
- g. None.
- h. Our Technical Monitor has been changed to Frederick Gordon, Jr.
- i. No change in descriptor forms prepared at this time.
- i. No listing of change in data request forms.
- k. No formal request made for data collection platforms at this time.